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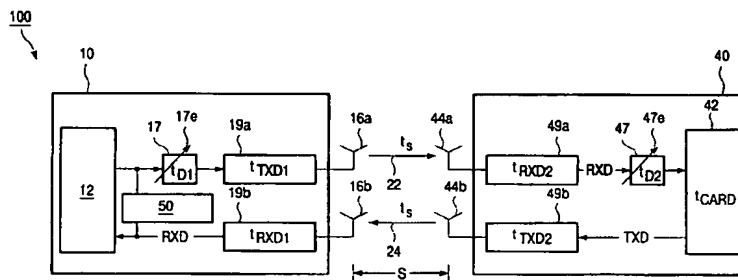
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- (54) Title: ELECTRONIC COMMUNICATION SYSTEM AND METHOD OF DETECTING A RELAY ATTACK THEREON



- (57) **Abstract:** In the case of an electronic communication system (100) having; a) at least one base station (10) having at least one antenna unit (16: 16a, 16b), in particular in coil form, which base station (10) is arranged in particular on or in an object to be secured against unauthorized use and/or against unauthorized access, such as on or in, say, a means of transport or on or in a access system, and, b) at least one transponder station (40), in particular in data-carrier form, having at least one antenna unit (44: 44a, 44b), in particular in coil form, which transponder station (40), c) may in particular be carried with him by an authorized user and/or, d) is designed to exchange data signals (22, 24) with the base station (10), in which case, by means of the data signals (22, 24), e) the authorization for use and/or access can be determined and/or, f) the base station (10) can be controlled accordingly, and in the case of a method of detecting and/or guarding against at least one, in particular external, attack, and preferably at least one relay attack, on an electronic communication system (100) of this kind, to enable the electronic communication system (100) and the method to be further developed in such a way that the attack is at least made substantially more difficult and if possible is fully guarded against and prevented, it is proposed that, g) there be arranged in the base station (10) at least one first delay element (17) for setting a defined, and in particular substantially constant, signal transit time ( $t_1$ ) within the base station (10) and/or, h) there be arranged in the transponder station (40) at least one second delay element (47) for setting a defined, and in particular substantially constant, signal transit time ( $t_2$ ) within the transponder station (40).